

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1.-38. (canceled)

39. (new) A connector for connecting a windshield wiper arm to a first transverse hinge pin belonging to a structure element of a wiper blade unit, the connector comprising:

two parallel vertical side cheek plates interconnected by a body, the body defining a first recess into which the first transverse hinge pin can be inserted radially,

wherein the body has an outside convex cylindrical face portion, and an inside vertical longitudinal face of each of the side cheek plates of the connector has a shaped relief, the convex cylindrical face portion and the two inside vertical longitudinal faces configured to receive an inside wall of the end of an arm that belongs to a first category of arm, which end is in the form of a U-shaped hook such that a top branch of the U-shaped hook of the first category of arm is born against a top horizontal longitudinal face of a rib of the shaped relief.

wherein the connector has a second cylindrical recess, for receiving a second transverse pin of an arm that belongs to a second category of arm and that extends transversely from a side edge of the end of the arm; the recess defined in part by an elastically deformable locking tongue extending longitudinally and a first longitudinal end of the locking tongue is fastened to the body, the locking tongue being suitable for retracting the second transverse pin, for enabling the second transverse pin to be inserted, and for causing the second transverse pin to be locked transversely in a position in which it is mounted in the second cylindrical recess, and

wherein a second longitudinal end of the locking tongue is connected to the body by a film of material, and the dimensions of the film are determined so that the second recess is suitable for receiving the second transverse pin of a first or of a second size, the

second size being greater than the first size, and inserting the second transverse pin of the second size causes the film of material to break.

40. (new) The connector according to claim 39, wherein the body further comprises a front segment defining the first recess, a front outside wall of the front segment being suitable for being received against the inside end wall of the U-shaped hook of the first category of arm, and a rear segment extending horizontally above the locking tongue, a horizontal top face of the rear segment defining a bearing face for bearing against a top branch of the U-shaped hook, and a bottom face of the rear segment being provided with a concave portion that defines in part the second recess, in association with a concave portion of a top face of the locking tongue.
41. (new) The connector according to claim 39, wherein the body further comprises a locking element suitable for being received in an annular groove formed in a cylindrical wall of the second transverse pin of the first size or of the second size for locking the second pin transversely in a position in which it is mounted in the second recess.
42. (new) The connector according to claim 41, wherein the locking tongue exerts a resilient locking force on the second transverse pin so as to prevent the locking element from disengaging from the annular groove.
43. (new) The connector according to claim 41, wherein the locking element further comprises a second elastically deformable tongue that extends substantially longitudinally forwards from a front longitudinal end of the rear segment of the body, the second elastically deformable tongue being suitable for retracting upwards to enable the second transverse pin to be inserted, and being suitable for being received at least in part in a peripheral groove in the second transverse pin so as to lock the second transverse pin transversely, in association with the locking tongue.
44. (new) The connector according to claim 43, wherein the second elastically deformable tongue has a transverse width complementary to a width of the annular groove in the second transverse pin.

45. (new) The connector according to claim 40, wherein the front longitudinal end of the elastically deformable locking tongue is fastened to the front segment.
46. (new) The connector according to claim 40, wherein the body further comprises a rear bottom segment having a front face that is provided with a rib which is suitable for cooperating with a releasing tab so as to hold the elastically deformable locking tongue in a position in which the second recess is open.
47. (new) The connector according to claim 46, wherein the rear bottom segment comprises a bottom bearing face for bearing against a top face of a horizontal bottom segment of the end of the arm belonging to the first category of arm.
48. (new) The connector according to claim 39, wherein the connector is suitable for receiving an end of a third category of arm, the end of the third category of arm comprising a shaped-section member segment that extends substantially longitudinally forwards in a third cylindrical recess of a longitudinal major axis, and that is open in a rear face thereof.
49. (new) The connector according to claim 40, wherein the connector is suitable for receiving an end of a third category of arm, the end of the third category of arm comprising a shaped-section member segment that extends substantially longitudinally forwards in a third cylindrical recess of a longitudinal major axis, and that is open in a rear face thereof.
50. (new) The connector according to claim 40, wherein the front segment of the body is provided with a notch of a longitudinal axis thereof, the notch being open in a rear face thereof and forming a front end of the third recess, and the bottom face of the rear segment and a top face of the rear bottom segment of the body, in combination with the two vertical longitudinal faces on the inside of the side cheek plates, defining a rear segment of the third recess.
51. (new) The connector according to claim 49, wherein the end of the arm belonging to the third category of arm is provided with a lug which projects upwards relative to the top face of the end of the arm belonging to the third category, and the end of the arm is suitable for being received

in a vertical orifice of the rear segment for longitudinally locking the end of the arm belonging to the third category in a position in which it is mounted in the third recess.

52. (new) The connector according to claim 39, wherein a portion of the locking tongue is curved downwards so that for at least one size of the arm belonging to the first category, in the assembled position the film of material is broken, and the locking tongue is deformed elastically upwards so as to exert a substantially vertical force downwards on the top face of the horizontal bottom segment of the end of the arm belonging to the first category.

53. (new) The connector according to claim 52, wherein for at least a second size of the arm belonging to the first category, the film of material connects the second longitudinal end of the locking tongue to the body so as to exert a substantially vertical force downwards on the top face of a second horizontal bottom segment of the end of the arm belonging to the first category.

54. (new) The connector according to claim 39, wherein a side edge of the locking tongue is extended transversely outwards by a rounded projection.

55. (new) The connector according to claim 43, wherein the second tongue is provided with two side studs disposed on either side of a front longitudinal end of the second tongue, the side studs extending transversely towards an outside of the connector and passing through respective plurality of orifices in the associated side cheek plates so that a free end of each stud comes flush with an outside vertical longitudinal face of the associated cheek plate.

56. (new) The connector according to claim 55, wherein the arm belonging to the third category of arm is in a position in which the arm is mounted in the third recess, each of the side studs being in vertical abutment against a top edge of the orifice of the associated cheek plate.

57. (new) The connector according to claim 43, wherein a free front end of the second tongue is curved back downwards so that the end of the arm belonging to the third category is inserted into the third recess, the second tongue being deformed elastically upwards and the free front end of the second tongue exerting a return force directed substantially downwards on a top face of the end of the arm belonging to the third category.

58. (new) The connector according to claim 43, wherein the free front end of the second tongue is extended upwards by a finger so that when the end of the arm belonging to the first category is in an assembled position, the second tongue is deformed elastically downwards and acts via the finger to exert a return force directed substantially upwards on a bottom face of a horizontal top first segment of the end of the arm belonging to the first category.
59. (new) The connector according to claim 39, wherein the front end segment of each cheek plate that extends cantilevered out forwards from the body is elastically deformable and is provided with a ramp-forming abutment on the vertical longitudinal face facing inside thereof so as to retract when the end of the arm belonging to the first category is inserted, and so as to lock the U-shaped hook in a position in which it is mounted around the body of the connector.
60. (new) The connector according to claim 59, wherein the ramp-forming abutment extends over a top portion of the front end segment of the associated cheek plate, and a bottom portion of the front end segment is provided with an opening for insertion of the U-shaped hook.
61. (new) The connector according to claim 40, wherein the shapes in relief comprise a rib provided on the vertical longitudinal face facing inside thereof of each side plate of the connector, the rib extending longitudinally above the top face of the rear segment of the body for positioning the end of the arm belonging to the first category.
62. (new) The connector according to claim 61, wherein the rib is formed so that a top face of the rib forms a vertical bearing surface for a top branch of the U-shaped hook having at least a first size of arm, and so that a vertical face thereof transversely positions the top branch of the U-shaped hook of the arm of a second size.
63. (new) The connector according to claim 39, wherein the shapes in relief further comprise a second projection disposed vertically below the body so as to perform at least in part a positioning of the connector against the inside wall of the end of the arm belonging to the first category.

64. (new) The connector according to claim 63, wherein the second projection is formed so that a top face thereof vertically positions the connector for a first size of the arm belonging to the first category, a bottom face thereof vertically positions the connector for a second size of the arm belonging to the first category, and an inside vertical face thereof transversely positions the connector for a third size of the arm belonging to the first category.
65. (new) The connector according to claim 39, wherein the bottom face of the locking tongue is provided with at least one rib for vertically and/ or transversely positioning the arm belonging to the first category and of at least one size.
66. (new) The connector according to claim 65, whercin the at least one rib extends substantially vertically downwards along a side edge of the bottom face of the locking tongue.
67. (new) The connector according to claim 54, wherein the projection of the locking tongue extend transversely so that a free transverse end of each projection comes flush with the outside vertical face of the associated cheek plate.
68. (new) The connector according to claim 67, wherein each projection is curved so that a curvature of a top face thereof is substantially complementary to the outside cylindrical wall of the second transverse pin of the second size.
69. (new) The connector according to claim 68, wherein a curvature of a top edge of the opening is substantially identical to a curvature of the outside cylindrical wall of the second transverse pin of the second size.
70. (new) The connector according to claim 55, wherein each of the side studs have a bearing surface for bearing against the outside cylindrical surface of the second transverse pin, the bearing surface being complementary to the outside cylindrical wall of the second transverse pin.

71. (new) The connector according to claim 39, wherein each cheek plate is provided with a notch which extends vertically downwards from the top edge of the associated cheek plate and which is complementary to a manipulator element for manipulating the connector.
72. (new) The connector according to claim 71, wherein the notch substantially forms an upside-down T-shape in which a bottom edge of a horizontal branch extends vertically above the top face of the front element of the body of the connector.